PURCHASE DESCRIPTION

LIGHT, AIMING POST: M14

FEBRUARY 2, 2000

1. SCOPE.

1.1 Scope. This purchase description covers the M14 Aiming Post Light that provides night illumination of aiming posts and has a manual (switch) selection of either red or green light.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this purchase description. This section does not include documentation cited in other sections of this purchase description or recommended for additional information or as examples. While effort has been made to ensure completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this purchase description, whether or not they are listed.

2.2 Government Documents.

2.2.1 Specifications, Standards, and Handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2 b)

STANDARDS

FEDERAL

FED-STD-595	Colors Used in Government Procurement

DEPARTMENT OF DEFENSE

MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-1916	DoD Test Method Standard

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other Government Documents, Drawings, and Publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

Title 49 Code of Federal Regulations (49 CFR)

(Copies of other Government documents drawings, and publications required by contractors in connection with specific acquisition functions should be obtained from U.S. Army TACOM-ARDEC, AMSTA-AR-QAW-E, Picatinny Arsenal, NJ 07806-5000.)

2.3 Order of Precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws, regulations and contractual requirements unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First Article. When specified (see 6.2.c) a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Operating requirements.

3.2.1 Light Projection. When the Aiming Post Light is mounted on the aiming post, center of focus of the radiated light shall be projected 90 degrees plus or minus 5 degrees from the axis of the aiming post.

3.2.2 Illumination Criteria. The Aiming Post Light shall have the capability to emit both red or green light to distinguish between different modes of the gun operation. The operator manually selects the color of the light output by using the light switch.

3.2.2.1 Light Color. Illumination color wavelength shall be within the range of 520 to 575 nanometers for green and within the range of 620 to 660 nanometers for red.

3.2.2.2 Brightness. The luminous intensity (brightness) of the light shall be 15 to 30 millicandela (180 to 360 millilumens) at the point of illumination.

3.2.3 Field of View. The field of view of the projected light shall be from 20 to 25 degrees in the horizontal plane and no greater than 10 degrees in the vertical plane either side of the axis formed by the projection of the light.

3.2.4 Flicker. There shall be no visible flicker in the Aiming Post Light under all performance conditions. Flicker is defined as any change in the intensity of the light beam discernable by the human eye.

3.2.5 Switch. The switch shall allow the operator to select either red or green illumination when turning the device on by actuating the switch. The switch shall have a solid positive action and shall retain the position it is put in under all performance conditions.

3.2.6 Automatic Cycle Time. The Aiming Post Light shall contain an integral timing circuit that shall automatically turn the unit off after the light has been continuously on for 24 ± 2 hours.

3.2.7 Power. The Aiming Post Light shall be battery powered. Batteries used to power the Aiming Post Light shall be D-Cell, or smaller size. The battery (ies) shall be operator replaceable and (an) internal part(s) of the Aiming Post Light. The item shall be so designed that the battery (ies) can be easily replaced without the use of additional tools. Batteries, recognized by Underwriters Laboratory, which are readily available in the commercial marketplace, or Preferred Military Batteries (see 6.2.h) are desired.

3.2.7.1 Power Life. The battery (ies) used to power the Aiming Post Light shall provide a minimum of 250 hours illumination at 25 C (77 F) without being replaced or recharged. When the Aiming Post Light is operated at –40 C (-40 F), the battery (ies) shall provide a minimum of 24 hours illumination without being replaced or recharged.

3.3 Interface requirements

3.3.1 Interface. The Aiming Post Light shall include provisions that allow the operator to attach it to an 1.125 inch diameter aiming post without requiring the use of additional tools or equipment. The clamping mechanism shall retain the Aiming Post Light on the aiming post and prevent the Aiming Post Light from sliding or rotating. The maximum dimensions shall be as follows: length -- 9.0 inches; width -- 2.0 inches; depth -- 4.5 inches. The weight of the Aiming Post Light without batteries shall not exceed 1.5 pounds.

3.4 Support and Ownership Requirements

3.4.1 Color. The exterior color of the Aiming Post Light shall be black, dark green, or forest green with a matte finish in accordance with FED-STD-595.

3.4.2 Materials. The contractor shall select the materials, but the materials shall be capable of meeting all of the operational and environmental requirements specified herein. Materials used, including all components, shall not support fungus growth to any extent that would preclude proper functioning. Radioactive materials shall not be used.

3.4.3 Human Factors Engineering. The Aiming Post Light shall permit ease of use and maintenance when the item is operated and maintained by soldiers dressed in arctic clothing and MOPP IV gloves.

3.4.4 Transportability. The battery (ies) used to power the Aiming Post Light shall be unrestricted or shall meet the exemption of the transportation requirements in Title 49 Code of Federal Regulations (49 CFR) (See 6.2i).

3.4.5 Identification and Marking. Item identification shall be in accordance with MIL-STD-130.

3.4.6 Reliability. The Aiming Post Light, excluding battery (ies) shall demonstrate a 500-hour Mean-Time-To-Failure. The desired level of reliability is 2,000 hours Mean-Time-To-Failure.

3.4.7 Workmanship. All components and assemblies shall be free of dirt and other extraneous materials. Burrs, slivers, rough die, tool, and grinding marks, dents and cracks shall be unacceptable. Castings, molded parts and stampings shall be free of sand, fins, pits, blowholes and spurs. The surfaces of parts to be welded or brazed shall be clean. All scale and flux shall be removed from the finished welded area. The welds shall be smooth. Threaded fasteners shall not be missing, broken, cracked or stripped of threads. There shall be no defects affecting serviceability, durability, operation or maintenance.

3.4.8 Safety and Health. The Aiming Post Light, complete with battery (ies), shall not present a High or Medium Risk Level to personnel or equipment (6.3.2 and 6.3.4).

3.5 Environmental Requirements.

3.5.1 Storage Temperatures. The Aiming Post Light shall not exhibit any degradation of materials or performance after storage at standard ambient temperatures of - 60° F and + 160° F.

3.5.2 Operating Temperatures. The Aiming Post Light shall not exhibit any degradation of materials or performance, while exposed to and thermally stabilized at ambient temperatures of - 40° F and + 150° F.

3.5.3 Watertightness. The Aiming Post Light shall perform as specified herein and show no indication of damage or moisture penetration to interior cavities when exposed to water.

3.5.4 Humidity. The Aiming Post Light shall be capable of withstanding humidity and shall perform as specified herein when exposed to high humidity.

3.5.5 Sand and Dust. The Aiming Post Light shall be capable of withstanding blowing sand and dust and shall perform as specified herein when exposed to blowing sand and dust (See 6.3.3).

3.5.6 Vibration. The Aiming Post Light shall perform as specified herein and show no indication of damage after experiencing vibration levels normally encountered during transport.

3.5.7 Drop. The Aiming Post Light shall be perform as specified herein and show no evidence of damage after undergoing shock normally induced by dropping the item four feet.

4. VERIFICATION

TABLE I. REQUIREMENT/VERIFICATION CROSS-REFERENCE MATRIX

METHOD OF VERIFICATION 1 – Analysis 2 – Demonstration 3 – Examination 4 – Test					CLASSES OF VERIFICATION A – Design verification B – First article inspection C – Conformance inspection D – Production control				
Section 3	Verification Method				Verification Class				Section 4
	1	2	3	4	A	B	C	D	
3.2.1		x				x	x		
3.2.2		x				x			
3.2.2.1				x		x	x		4.4.1
3.2.2.2				x		x	x		4.4.2
3.2.3				x		x			4.4.3
3.2.4		x				x			
3.2.5		x				x	x		
3.2.6				x		x			
3.3.1	x	x				x	x		
3.4.1		x				x			
3.4.2	x	x				x			
3.5.1				x		x		x	4.4.4
3.5.2				x		x		x	4.4.5
3.5.3				x		x		x	4.4.6
3.5.4				x		x			4.4.7
3.5.5				x		x			4.4.8
3.5.6				x		x			4.4.9
3.5.7				x		x		x	4.4.10
3.4.8	x	x				x			
3.4.3		x				x			
3.4.4	x	x				x			
3.4.5		x				x			
3.4.6	x	x				x			
3.4.7		x				x	x		
3.2.7		x				x	x		
3.2.7.1		x				x			

4.1 Classification of Inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2)

b. Conformance inspection (see 4.3)

4.1.1 Inspection Conditions. Unless otherwise specified, all inspections shall be performed in accordance with the test conditions specified in paragraph 4.4 of this document.

4.2 First Article Inspection.

4.2.1 Submission. The contractor shall submit a first article sample of 3 units for evaluation in accordance with provisions of 4.2.2.

4.2.2 Inspections to be Performed. As determined by the Government, the first article assemblies, components and test specimens may be subjected to any or all of the examinations and tests specified in this purchase description (see Table I) and be inspected for compliance with any or all requirements of the purchase description and the applicable drawings.

TABLE II. First Article Inspection.

No.	Examination or Test	Conformance Criteria	Requirement Paragraph	Inspection Method Reference
1	Light Projection	100 percent	3.2.1	Demonstration
2	Illumination Criteria	100 percent	3.2.2	Demonstration
3	Light Color	100 percent	3.2.2.1	4.4.1
4	Brightness	100 percent	3.2.2.2	4.4.2
5	Field of View	100 percent	3.2.3	4.4.3
6	Flicker	100 percent	3.2.4	Demonstration
7	Switch	100 percent	3.2.5	Demonstration
8	Automatic Cycle Time	100 percent	3.2.6	SMTE
9	Interface	100 percent	3.3.1	Demo/Analysis
10	Power	100 percent	3.2.7	Demonstration
11	Power Life	100 percent	3.2.7.1	Demonstration
12	Dimensions	100 percent	3.3.1	SMTE
13	Weight	100 percent	3.3.1	SMTE
14	Color	100 percent	3.4.1	Demonstration
15	Materials	100 percent	3.4.2	Analysis/Demo
16	Storage Temperature	100 percent	3.5.1	4.4.4
17	Operating Temperature	100 percent	3.5.2	4.4.5
18	Watertightness	100 percent	3.5.3	4.4.6
19	Humidity	100 percent	3.5.4	4.4.7
20	Sand and Dust	100 percent	3.5.5	4.4.8
21	Vibration	100 percent	3.5.6	4.4.9
22	Drop	100 percent	3.5.7	4.4.10
23	Safety and Health	100 percent	3.4.8	Analysis
24	Human Factors Engineering	100 percent	3.4.3	Demonstration
25	Transportability	100 percent	3.4.4	Analysis/Demo
26	Identification and Marking	100 percent	3.4.5	Demonstration
27	Reliability	100 percent	3.4.6	Analysis/Demo
28	Workmanship	100 percent	3.4.7	Demonstration

4.2.3 First Article Rejection. If any assembly, component or test specimen fails to comply with any of the applicable requirements, the first article sample shall be rejected.

4.3 Conformance Inspection.

4.3.1 Inspection Lot Formation. Lot formation shall be in accordance with Section 4 of MIL-STD-1916.

4.3.2 Examinations and Tests.

a. Classification of Characteristics. For examinations and tests cited herein or when required by contract; Critical, Major and Minor Characteristics are defined in Section 3 of MIL-STD-1916.

b. Inspections to be performed. The contractor shall perform all of the tests specified in Table III.

TABLE III. Conformance inspection.

Class	Examination or Test	Requirement Paragraph	Suggested Inspection Method
Critical:			
C1	Switch	3.2.5	Demonstration
Major:			
101	System Design	3.2.1	Demonstration
102	Brightness	3.2.2.2	4.4.2
103	Light Color	3.2.2.1	4.4.1
104	Interface	3.3.1	Demo/Analysis
105	Power	3.2.7	Analysis/Demo
Minor:			
201	Workmanship	3.4.7	Demonstration

c. Alternative Conformance Provisions. Unless otherwise specified herein or provided for in the contract, alternative conformance procedures, methods or equipment, such as statistical process control, tool control, variables sampling or other types of sampling plans may be proposed to the Government by the contractor.

4.3.3 Production Control Tests. Production control tests shall include storage and operating temperature tests (4.4.4 and 4.4.5), water tightness test (4.4.6) and drop test (4.4.10). These tests shall be performed on 3 out of every 300 production units, but no more often than once every three months nor less than once every six months. In the event of failure, another sample of 3 units shall be drawn to determine whether a trend exists. Consecutive failures shall cause rejection of the lot.

4.4 Methods of Inspection.

4.4.1 Light Color. The Aiming Post Light, with fresh battery (ies), shall be subjected to a photometric test. The illumination color wavelength for both the red light and the green light shall meet purchase description requirements of 3.2.2.1. Nonconformance shall constitute failure of this test.

4.4.2 Brightness. The Aiming Post Light, with fresh battery (ies), shall be subjected to a photometric test. The brightness for both the red light and the green light shall meet purchase description requirements of 3.2.2.2. Nonconformance shall constitute failure of this test.

4.4.3 Field of View. Stand 50 feet away from a turned on Aiming Post Light directly in the line of light projection. Have the Aiming Post Light rotated about its vertical axis until the light is just visible. Stand in the new line of light projection and note the position. Using trigonometric functions calculate the field of view. Repeat the test, rotating the Aiming Post Light in the opposite direction. Repeat the above in both the horizontal and vertical planes. Repeat the above for the different light color. The results shall meet the requirements of 3.2.3.

4.4.4 Storage Temperature. The Aiming Post Light, complete with battery (ies), shall be placed in a climatic chamber and the temperature reduced gradually (see "Note" below) to -60° F and allowed to remain at this temperature for 4 hours. After thermal stabilization is reached the temperature shall gradually be (see "Note" below) increased to + 160° F and held constant for 4 hours. After thermal stabilization is reached the temperature shall then be reduced to standard ambient temperature and allowed to remain at this temperature for 4 hours. The Aiming Post Light, complete with battery (ies), shall then be subjected to a visual and tactile examination and shall meet the requirements of 3.5.1.

Note: The rate of temperature change in the climatic chamber shall not exceed 3 degrees per minute throughout the temperature cycling tests of 4.4.4 and 4.4.5.

4.4.5 Operating Temperature. This test shall be performed in the same basic manner as the test of 4.4.4, except that the chamber shall be held at - 40° F and + 150° F. While the test item(s) is at these temperature extremes it shall be subjected to a visual and tactile examination and shall meet the requirements of 3.5.2

4.4.6 Watertightness. The Aiming Post Light, complete with battery (ies), shall be assembled. All threaded, gasketed interfaces shall be assembled hand tight if designed to be tightened. Hand tight shall be tight enough to ensure a good seal without damaging the gasketing material. Submerge the assembled Aiming Post Light in water at room temperature (77° F ± 5° F) for one hour at a depth of 18 inches. Remove the item, wipe the outside dry, and inspect. When inspected the item shall show no evidence of moisture within interior cavities and shall meet the requirements of 3.5.3.

4.4.7 Humidity. The Aiming Post Light, complete with battery (ies), shall be assembled. All threaded, gasketed interfaces shall be assembled hand tight if designed to be tightened. Hand tight shall be tight enough to ensure a good seal without damaging the gasketing material. The assembled item(s) shall be preconditioned in a climatic chamber at 73 degrees F with 50 percent relative humidity for 24 hours prior to starting the test. Gradually raise the chamber temperature and relative humidity to 110degrees F ± 2(5) degrees F and 85 ± 5 percent. After 12 hours of exposure at 110 degrees F and 85 percent remove the item from the chamber, wipe the outside dry, and inspect. When inspected the item shall show no evidence of moisture within interior cavities and shall meet the requirements of 3.5.4.

4.4.8 Sand and Dust. Representative small-particle dust and fine sand (see 6.3.3) shall be placed on and around the switch. The switch mechanism shall be tested by operating the switch for 25 cycles. A cycle is defined as On -- green illumination, Off, On -- red illumination, Off. Failure of the switch to complete 25 cycles shall constitute failure of this test.

4.4.9 Vibration. The Aiming Post Light, with battery (ies) installed, shall withstand vibration for 5 minutes each in 3 orthogonal axes. Vibration in each direction shall be at a constant frequency of thirty Hz with an amplitude of 1/16-inch (1/8-inch total excursion) for a period of five minutes plus or minus 15 seconds. Subsequent to vibration, the Aiming Post Light shall not have been damaged or adversely affected and shall meet the requirements of 3.5.6.

4.4.10 Drop. The Aiming Post Light, with battery (ies) installed, shall be dropped in free fall onto a wooden floor from a height of 48 inches. The Aiming Post Light shall be dropped three times on three orthogonal surfaces. Subsequent to shock, the Aiming Post Light shall not have been damaged or adversely affected and shall meet the requirements of 3.5.7.

4.5 Safety and Health. During handling and functioning of the Aiming Post Light, under any environmental condition, analysis and observations shall be made to ensure that using the Aiming Post light poses no physical danger to the user as specified in 3.4.8 (see 6.2.f, 6.3.2 and 6.3.4).

5. PACKAGING.

5.1 Packaging . For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2.e). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department of Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be useful, but is not mandatory.)

6.1 Intended Use. The M14 Aiming Post Light is intended for use with the M1A2 Aiming Posts. M1A2 Aiming Posts are military unique and serve as the alternative aiming reference and as the alternative for gun laying for direction and elevation for U.S. Army towed howitzers. The M14 Aiming Post Light is attached to the M1A2 Aiming Post and is used during night operations. In preparing for night operations, the operator manually selects either red or green light output when the light is turned on. The light is turned on using a manually actuated switch that is located on the device. The M14 Aiming Post Light allows the towed howitzer gunner to identify and sight on M1A2 aiming posts located at nominal 50 meters and 100 meters distances from the gun at night.

6.2 Acquisition Requirements. Acquisition documents should specify the following:

a. Title, number and date of the specification.

b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2.2).

c. When first articles are required for inspection, the number of samples and identification of the tests and inspections to be performed from Table I (see 3.1).

d. When Government-loaned property is required.

e. Level of preservation and packing required (see 5.1).

f. When a safety risk assessment is required (see 3.4.8).

g. When component reliability data and information such as reliability predictions, demonstrated reliability of similar products, item reliability as demonstrated by previously conducted contractor testing, shall be provided.

h. Preferred Batteries. A list of preferred power sources is available from:
Commander, CECOM
AMC Battery Management Office

ATTN: AMSEL-LC-P-AMC
Fort Monmouth, NJ 07703-5011

i. Transportation Requirements (See 3.4.4). International Air Transport Association's (IATA) Requirements are available from:

International Air Transport Association
2000 Pearl Street
Montreal, Quebec Canada
H3A2R4

6.3 Definitions.

6.3.1 Recovered Materials. For the purpose of this requirement, recovered materials are those materials that have been collected from solid waste and reprocessed to become a source of raw materials, as distinguished from virgin raw materials. Recovered materials shall be used to the maximum extent possible.

6.3.2 High or Medium Risk Level. Hazard severity and probability categories resulting in high or medium risk levels. High risk levels include hazard severity/probability levels IA-ID, IIA-IIC &IIIA. Medium risk levels include hazard severity/probability levels IE, IID, IIB &IVA. (Reference MIL-STD-882, System Safety Program Requirements)

6.3.3 Small Particle Dust and Fine Sand. MIL-STD-810 identifies sand and dust compositions used in the Blowing Dust Test. Compositions identified in MIL-STD-810 are appropriate for the Sand and Dust Test (Par 4.4.8) in this specification.

6.3.4 Safety Risk Assessment. The safety risk assessment shall identify all safety features of the system, design, and procedural hazards that may be present in the system being acquired, and it shall also identify specific procedural controls and precautions that should be followed. The safety risk assessment shall: (a) list all hazards by subsystem or major components that have been identified, (b) discuss all actions that have been taken to eliminate or control the hazards identified, (c) discuss the effects of the controls on the probability of occurrence and severity level of the potential event, and (d) discuss any residual risks that remain after the controls are applied or for which no controls have been applied. Safety precautions and procedures necessary during use, storage, transportation, and disposal shall be identified.

6.4 Subject Term (key word) listing:

Batteries, preferred
Battery, life
Flicker, light
Inspection, conformance
Inspection, first article
Power, life
Reliability
Requirements, operating
Switch, operation
Testing, environmental

Development, Acquisition and Fielding of Weapon and Information Systems with Batteries

The following policy memorandum concerning Development, Acquisition, and Fielding of Weapon and Information Systems Batteries was signed by Mr. Paul J. Hoeper, Army Acquisition Executive, on January 4, 2000. The actual memorandum is viewable in Adobe Acrobat format on the SAAL web site at http://www.sarda.army.mil/news.htm.

This memorandum reissues, clarifies, and expands Army acquisition policy and procedures for reducing battery and battery-related costs. Battery and related Operational and Support (O&S) costs consume a large portion of the field commanders' budgets. This situation will become more acute as we proceed towards a digitized battlefield. It is incumbent on all of us in the acquisition community to aggressively identify and implement methods to substantially reduce these costs.

The Army's objectives are to decrease the number and types of batteries, to increase the power and longevity of batteries, and to reduce the power needs of new systems and equipment. The goal for new systems to have either rechargeable batteries or batteries that will last five years or longer remains in effect. Accordingly, Program Executive Officers (PEO's), Deputies for Systems Acquisition (DSA's), and Program Managers (PM's) shall:

a. Design equipment to use battery power more efficiently. Power management techniques such as the use of power conserving software and more energy efficient circuitry/components must be considered in all existing and future acquisitions.

b. Design equipment that uses military or commercial standard rechargeable/reusable batteries for training and garrison operations, where practicable, in future development, product improvement, and production contracts for weapon and information systems using battery power.

(1) Effective no later than October 1, 2002, all PEO's, DSA's, and PM's will field new equipment using military or commercial standard rechargeable/reusable batteries with an initial issue quantity of the rechargeable battery(ies) and its associated charger.

(2) Where a prior fielding provided an organization with compatible chargers, PM's will adjust their initial issue of chargers through Materiel Fielding Plan agreements with receiving units. Additionally, if appropriate, PM's will coordinate Basis of Issue Plan (BOIP) changes to ensure field units are not burdened with excess chargers.

c. Use either military preferred batteries or commercial off-the-shelf batteries that will satisfy the above objectives when military or commercial standard rechargeable/reusable batteries are not practical. As the U.S. Army Materiel Command's battery manager, the U.S. Army Communication-Electronics Command's Power Sources Center of Excellence (PSCOE) has prepared a military preferred battery listing (enclosed and available on the Internet at www.monmouth.army.mil/cecom/lrc/lrchq/power.html) and model Statement of Work for commercial off-the-shelf batteries to facilitate PEO/PM efforts in this area.

(1) PMs will coordinate system battery requirements with the PSCOE and obtain Army Acquisition Executive approval when a determination is made to use batteries other than those recommended by the PSCOE.

(2) It is the duty of the PSCOE to maintain the military preferred battery list current and in-line with the latest technology. The PSCOE must also ensure the military preferred battery list encompasses the various requirements for functional area use (e.g., communications-electronics, aircraft, ground vehicles, watercraft, and generators).

d. Invite PSCOE representatives to participate in appropriate Integrated Product Teams and program working groups. The PSCOE can assist materiel developers in addressing total system power needs that

minimize O&S costs. Additionally, PEOs and DSAs should actively participate in the Integrated Power Management (IPM) IPT. Officially chartered by the Military Deputy and the Deputy Chief of Staff for Operations and Plans, this IPT has the requirement to assess and prioritize Army-wide power management initiatives for improved power generation and reduced consumption.

These requirements do not apply to batteries used in equipment designed to be disposed of after one-time use or in mines, munitions, and missile applications that are embedded, non-replaceable, and used one time (i.e., when a missile is fired).

Battery and battery-related O&S costs can be, and must be, reduced. I expect your full support and attention to this important area. The Acquisition Policy office (SAAL-RP) will review this policy every 12 months with appropriate organizations to ensure compliance and to make adjustments in the requirements as necessary.

Points of contact for this policy are Mr. Chip Woody, SAIC support to SAAL-RP, DSN: 664-7157, commercial (703) 604-7157, and Mrs. Carmella Rutkowski or Mr. Rafael Casanova, Power Sources Center of Excellence, DSN: 992-8941, commercial (732) 532-8941.

(Mr. Chip Woody/SAIC-SAAL-RP/DSN 664-7157)

PREFERRED POWER SOURCE LIST
(as of November 1, 1999)

1. PREFERRED COMMERCIAL POWER SOURCES

Any battery configuration that is readily available in the consumer marketplace is eligible for consideration as a Preferred Commercial Power Source. Examples of these batteries with the corresponding NSN are:

BATTERY TYPE	NSN	MANAGED BY
"D" CELL ALKALINE	6135-00-835-7210	DLA
"C" CELL ALKALINE	6135-00-985-7846	DLA
"AA" CELL ALKALINE	6135-00-985-7845	DLA
"AA" CELL LITHIUM	6135-01-333-6101	DLA
"AAA" CELL ALKALINE	6135-00-826-4798	DLA
"9 VOLT" ALKALINE	6135-00-900-2139	DLA
"6 VOLT" LANTERN (SPRING TERMINALS)	6135-00-643-1310	DLA
"6 VOLT" LANTERN (SCREW TERMINALS)	6135-00-995-1089	DLA
6TMF –WET (CONSIGNMENT)	6140-01-446-9506	DLA
6TMF – DRY (CONSIGNMENT)	6140-01-446-9498	DLA
2HN – WET (CONSIGNMENT)	6140-01-390-1969	DLA
4HN – WET (CONSIGNMENT)	6140-01-390-1968	DLA
6TLFP – WET (CONSIGNMENT)	6140-01-051-4900	DLA
6TLFP – DRY WITH OVERPACK (CONSIGNMENT)	6140-01-430-8847	DLA

2. PREFERRED MILITARY POWER SOURCES

2.1 COMMUNICATIONS-ELECTRONICS APPLICATIONS

2.1.1 NON RECHARGEABLE BATTERIES

BATTERY	NSN	MANAGED BY
BA-5590A/U	6135-01-143-9450	CECOM
BA-5588A/U	6135-01-088-2708	CECOM
BA-5567A/U	6135-01-090-5365	CECOM
BA-5347/U	6135-01-445-7946	CECOM
BA-5372/U	6135-01-214-6441	CECOM
BA-5800A/U	6135-01-440-7774	CECOM

2.1.2 RECHARGEABLE BATTERIES

BATTERY	NSN	MANAGED BY
BB-516A/U	6140-01-419-8191	CECOM
BB-390A/U	6140-01-419-8187	CECOM
BB-388A/U	6140-01-419-8190	CECOM
BB-503A/U	6140-01-419-8193	CECOM
BB-2847/U	6140-01-419-8194	CECOM

2.1.3 BATTERY CHARGERS

BATTERY CHARGER	NSN	MANAGED BY
PP-8444A	6130-01-443-0970	CECOM

2.2 VEHICULAR APPLICATIONS

2.2.1 BATTERIES

BATTERY	NSN	MANAGED BY
6TMF	6140-01-430-8847	TACOM
2HN (DRY)	6140-00-057-2553	DLA
2HN (WET)	6140-01-390-1969	TACOM
4HN (DRY)	6140-00-059-3528	DLA
4HN (WET)	6140-01-390-1968	TACOM
6TL (DRY) **	6140-01-210-1964	DLA

** - WHEN ASSETS ARE EXHAUSTED USE 6140-00-057-2553

2.2.2 BATTERY CHARGERS

BATTERY CHARGER	NSN	MANAGED BY
PP-1660D/U	6130-01-423-5737	CECOM

2.3 AVIATION APPLICATIONS

2.3.1 BATTERIES

BATTERY	NSN	MANAGED BY
BB-432B/A (10 amphrs)	6140-01-134-2277	CECOM
BB-433/U (30 amphrs)	6140-01-046-1116	DLA
MIL-B-81757/11-3 (20 amphrs)	6140-01-262-4580	DLA

2.3.2 ON BOARD BATTERY CHARGERS

NONE

2.4 MISSILE APPLICATIONS

2.4.1 BATTERIES

BATTERY	NSN	MANAGED BY
BA-5590	**6135-01-036-3495**	**CECOM**
BB-287	**6140-00-454-8261**	**MICOM**
JC1269	**6140-01-039-8766**	**MICOM**
JC1269	**6140-01-108-2159**	**MICOM**

2.4.2 BATTERY CHARGERS

BATTERY CHARGER	NSN	MANAGED BY
PP-8444A	**6130-01-443-0970**	**CECOM**

Pricing Sheet
DAAE20-00-R-0003
M14 Aiming Post Light

		Ordering Period 1		Ordering Period 2		Ordering Period 3	
F A T	Order Quantity	Unit Price	Weight	Unit Price	Weight	Unit Price	Weight
$	300 - 599	$	25%	$	25%	$	50%
	600 - 899	$	50%	$	50%	$	20%
	900 - 1,199	$	15%	$	15%	$	15%
	1,200 - 1,800	$	10%	$	10%	$	15%

The Evaluated Price will be calculated by summing the multiplication of each Order Quantity Unit Price by its respective Weight and the Minimum Order Quantity of the Range ie. 300, 600, 900, and 1,200 for each Ordering Period. In the case of Ordering Period 1 the FAT cost will be added as part of the Evaluated Price, if appropriate.
The sum of all Ordering Period Evaluated Prices will be the Total Evaluated Price.

ATTACHMENT 002

DOCUMENT SUMMARY LIST

Item: M14 AIMING POST LIGHT
NSN: 1290-01-148-4821
Control Number/PRON: P19FFMX1

Identifies all first tier documents (cited in SOW) (applicable DIDs). Also included are all referenced documents (2nd, (includes DID block 10 references), 3rd and lower tier) which have been tailored.

DOCUMENT CATEGORY:

CATEGORY O - Unless otherwise specified in the solicitation, contract, or contract modifications, all documents are for guidance and information only.

CATEGORY 1 - The requirements contained in the directly cited document are contractually applicable to the extent specified. All referenced documents are for guidance and information only.

CATEGORY 2 - The requirements contained in the directly cited document and the reference documents identified in the directly cited document are contractually applicable to the extent specified. All subsequently referenced documents are for guidance and information only.

CATEGORY 3 - Unless otherwise specified in the solicitation, contract or contract modification, all requirements contained in the directly cited document and all reference and subsequently referenced documents are contractually applicable to the extent specified.

Document Number (Contract Reference) Applicable Tailoring	Document Title	Document Date/ Document Category
1a. MIL-STD-2549 Table DIP 4-1	Configuration Management Data Interface	30 Jun 97 Cat 2
1b. DI-CMAN-81554 (seq A001)	Configuration Change Control Data Information Packet	30 Jun 97 Cat 2
2. ANSI/ISO/ASQC Q9001 Higher Level Contract Quality Requirement (Sec E)or equivalent	Quality Systems-Model for QA in Design/Devel., Prod., Installation & Servicing	1994

SECTION L

1. PROPOSAL REQUIREMENTS; CONTENT; FACTORS TO ADDRESS

NOTICE TO OFFERORS

WRITTEN PROPOSALS MUST ADDRESS ALL FOUR MAJOR FACTORS AND EACH SUBFACTOR WHERE APPROPRIATE IN ORDER TO BE CONSIDERED.

1. TECHNICAL CAPABILITY RISK

Technical Capability Risk is defined as the risk associated with the offeror's proposed approach in meeting the requirements of the solicitation. Technical Capability includes the item's technical comparison with the Purchase Description issued under this solicitation. Two factors are to be addressed: System Performance and Design and Power Source Life and Reliability. Of these factors, System Performance and Design is more important than Power Source Life and Reliability. The offeror shall address the following elements in the Technical Capability Area.

A. FACTOR 1. System Performance and Design

The offeror will describe, in detail, how its proposed Aiming Post Light will meet the requirements stated in the following paragraphs of the M14 Aiming Post Light Purchase Description. The following Subfactors are of equal importance:

Subfactor 1 -- Design and Interface	3.2.1, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, and 3.3
Subfactor 2 -- Illumination Criteria	3.2.2
Subfactor 3 -- Environmental Requirements	3.5
Subfactor 4 -- Human Factors and Safety	3.4.3 and 3.4.8

The offeror's proposal must be supported by documentation such as drawings, diagrams, test data, analyses, etc., as appropriate.

B. FACTOR 2. Power Source Life and Reliability

The offeror will describe, in detail, how its proposed Aiming Post Light will meet the power source life and reliability requirements stated in the M14 Aiming Post Light Purchase Description. The following Subfactors are of equal importance:

Subfactor 1 -- Power Source Life
Subfactor 2 -- Reliability

Subfactor 1. Power Source Life. The offeror will:

a. Identify the type of battery used and number of batteries required to operate the proposed design (reference para. 3.2.7.1 and para. 3.4.4 of the M14 Aiming Post Light Purchase Description).

b. Describe the number of continuous operating hours that would be expected from a fresh battery (ies) for the following temperatures: standard ambient [77 degrees $\pm$ 18 degrees F (25 degrees $\pm$ 10 degrees C)], and cold operating (-40 degrees F).

c. The offeror's proposal must be supported by documentation such as drawings, diagrams, test data, analyses, etc. as appropriate.

Subfactor 2. Reliability. The offeror will:

a. Describe the in detail, how its proposed Aiming Post Light will meet the requirement of Paragraph 3.4.6 of the M14 Aiming Post Light Purchase Description.

b. The offeror's proposal must be supported by documentation such as drawings, diagrams, test data, analyses, predictions, etc. as appropriate.

2. QUALITY RISK

Quality Risk is defined as the risk associated with the offeror's ability to provide a quality product in accordance with the requirements of this solicitation. Offerors with established, managed and systemic approaches to doing business tend to produce fully conforming items in accordance with contract requirements. Three factors are to be addressed: Quality System, Process Control System and Hardware Quality History. Of these factors, Quality System is of most importance, while Process Control System and Hardware Quality System, combined, are equal in importance to Hardware Quality History.

A. FACTOR 1. Quality System

The offeror will address the following questions in regard to its Quality System. Assessment will be based upon the offeror's present and past quality performance. All questions must be answered and are of equal importance.

a. What standard is your system certified to (ISO 9001, 9002, 9003, or other industry standard)?

b. If uncertified, what is it equivalent to?

c. How do you handle product deficiencies and implement corrective action?

d. Give examples and detail of customer satisfaction and market acceptance of similar products.

B. FACTOR 2. Process Control System

The offeror will address the following questions in regard to its Process Control System. Assessment will be based upon the offeror's data to determine how well its Process Control System will conform to all contractual requirements. All questions must be answered and are of equal importance.

a. What determines which processes to monitor?

b. How do you qualify your processes?

c. How do you monitor process variation? Offerors are to provide two examples.

d. How are the data that is generated used?

C. FACTOR 3. Hardware Quality History

The offeror will address the following questions in regard to its Hardware Quality History. Assessment will be based upon the available data reflecting valid offeror attributable hardware defects. Valid is defined as a manufacturing defect or design defect or an assembly defect. All questions must be answered and are of equal importance.

a. How many valid customer complaints have you received in the past two years? Offerors are to provide a written summary of each.

b. How many different systems do you produce? System is defined as a model numbered major end item, for example, the M137A1 Panoramic Telescope, or the M14 Aiming Post Light.

c. How many systems have received valid complaints in the past two years?

3. PERFORMANCE RISK

Performance Risk is defined as the risk associated with the offeror's likelihood of success in performing the requirements of the solicitation as indicated by the offeror's record of past performance. The offeror shall address two Subfactors in the Performance Risk Area:

Subfactor 1 -- Past Performance
Subfactor 2 -- Small Business Participation

Of these two Subfactors, Past Performance is more important than Small Business Participation.

A. FACTOR 1. Past Performance

Subfactor 1. Past Performance. The offeror will:

a. Submit a description of previous U.S. Government, and/or commercial contracts (all prime and major subcontracts), that are relevant (same or similar) size, scope, and complexity to the effort required in this solicitation, and performed, and/or delivered during the past three calendar years previous to the date of this solicitation.

b. For each of your relevant past contracts, provide the following information:

(1) Contract Number.

(2) Contract Type.

(3) Award Date and Current Price/Cost.

(4) Original delivery schedule.

(5) Final, or projected final, delivery schedule.

(6) Your (and any significant subcontractors) Commercial and Government Entity (CAGE) Code used for each contract and DUNS numbers and email address(es).

(7) Government or commercial contracting activity address.

(8) Contracting Officer's name(s), telephone/fax numbers and email address(es).

(9) Government or commercial contracting activity technical representative(s), name(s), telephone/fax numbers and email address(es).

(10) Government DCMC location and address. The Administrative Contracting Officer(s), Industrial Specialist(s), Quality Representative(s) name(s), address(es), telephone/fax numbers and email address(es).

(11) Provide a description for each similar effort contract/subcontract cited, explaining the similarities of that contract's requirements with the requirements of this solicitation.

(12) Include an explanation of delivery schedule requirements that were not met, and any corrective action(s) taken to avoid recurrence.

c. Cancellations and Terminations. Identify ANY AND ALL contracts, which may have been terminated in whole or in part, for "any reason" (i.e., Termination for Default, Termination for Convenience, Mutual Termination) during the past THREE YEARS, to include those currently in process of such termination. Additionally, provide information on any Show Cause or Cure Notices issued during the last three years. Include prime contractors; contract under which you were a subcontractor and any of your subcontractor's contracts. Provide the information requested in subparagraph b above for any of these contracts. If there were no cancellations or terminations, so state.

d. Offerors who intend to subcontract a major portion of the requirement of the solicitation, shall identify the proposed subcontractor(s) and provide adequate information as requested in subparagraph b above, in order for the Government to perform an evaluation of the subcontractor's capabilities and ability to perform the required tasks of this solicitation.

e. Offerors will include in their proposal the written consent of their proposed subcontractor(s) allowing the Government to discuss the subcontractor's past performance evaluation with the offeror during negotiation, if applicable.

Subfactor 2. Small Business Participation

a. Offerors are to identify the extent to which small businesses (SBs), HUBZone small businesses, small disadvantaged businesses (SDBs), woman-owned small businesses (WOSBs), historically black colleges/universities or minority institutions (HBCU/MIs) would be utilized in the performance of the proposed contract. The offeror's own participation as a SB, HUBZone SB, SDB, WOSB, or HBCU/MI is to be identified, and will be considered in evaluating small business participation.

b. The offeror is to address the following information in detail.

(1) All offerors are to provide:

(a) The names of SBs, HUBZone SBs, SDBs, WOSBs, or HBCU/MIs who would participate in the proposed contract, identifying specific components to be produced or services to be performed by them, and the estimated total dollars of such work; and

(b) A description of the offeror's performance, over the past three calendar years, in complying with the requirements of FAR 52.219-8, including description and available documentation of the methods employed to promote small business utilization and the internal methods used to monitor such utilization.

(2) Offerors who are large businesses, as defined by the Standard Industrial Code applicable to this solicitation, are also to provide a description of their performance over the past three calendar years in complying with the requirements of FAR 52.219-9, including documentation of their accomplishment of the goals established under Subcontracting Plans of prior contracts. Large businesses that have never held a contract incorporating FAR 52.219-9 shall so state.

5. PRICE AREA

a. Offerors are cautioned to submit firm fixed-price unit prices for all ordering periods and quantity ranges for CLIN 0001 on the Pricing Sheet, a copy of which is included as Attachment 2 to the solicitation. For Ordering Period 1, the offeror will enter a unit price for first article. All unit prices proposed will be binding.

b. The Government reserves the right to require the submission of any information necessary to validate the reasonableness of an offer.

2. PROPOSAL REQUIREMENTS, ORGANIZATION, FORMAT AND SUBMISSION

A. ORGANIZATION - Offerors shall submit proposals consisting of four parts -- part one shall be the Technical Proposal; part two shall be the Quality Proposal; part three shall be the Past Performance Proposal; and part four shall be the Price Proposal. The Request for Proposal number, DAAE20-00-R-0003, and the offeror's name shall be reflected on each part of the proposal. Each volume shall be as brief as possible. All information specific to each volume will be confined to that volume.

The offeror's proposal shall be submitted electronically. Hard copy proposals will not be accepted. Please refer to specific instructions for electronic submission of offers contained elsewhere in Section L of this solicitation.

B. FORMAT - The Technical, Quality and Past Performance proposals shall be presented in a clearly legible font, no smaller than size 10. Text pages shall not exceed 8½ inches in width by 11 inches in length, printed on one side only. For ease of reference, the offeror shall use a page numbering system for each part of the proposal. No reference to price shall be contained in the Technical, Quality or Past Performance proposals.

C. SUBMISSION - The offeror shall submit its proposal in accordance with Section L, the provision entitled "Electronic Bids/Offers".

3. DEFINITIONS:

A. "Past performance information", as used in this solicitation, is relevant information regarding a contractor's actions under previously awarded contracts. It includes the contractor's record of conforming to specifications and to standards of good workmanship; the contractor's adherence to contract schedules, including the administrative aspects of performance; the contractor's history for reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the contractor's business-like concern for the interests of the customer.

B. "Deficiency", as used in this solicitation, is a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

C. "Weakness", as used in this solicitation, is a flaw in the proposal that increases the risk of unsuccessful contract performance.

D. "Significant weakness", as used in this solicitation, is a flaw in the proposal that appreciably increases the risk of unsuccessful contract performance.

SECTION M

1. EVALUATION CRITERIA/BASIS FOR AWARD

A. Selection of an offeror for award will be based on an evaluation of proposals in the following Areas: 1) Technical Capability Risk; 2) Quality Risk; 3) Performance Risk; and 4) Price. Each Area is separately described below. Proposal ratings will be adjectival and narrative in manner. The award of a contract will be made to that offeror whose proposal offers the best value to the Government based on an integrated assessment of Technical Capability Risk, Quality Risk, Performance Risk, and Price. Consequently, the Government may award to other than the low priced offeror. The Area of Technical Capability Risk is the most important; the Areas of Quality Risk and Performance Risk are of equal importance; each of these Areas is more important than the Area of Price. Any proposal that is unrealistically high or low in price may be deemed indicative of a failure to comprehend the Government's requirements and may be rejected for such a reason. Offerors are urged to ensure that their proposals are submitted on the most favorable terms in order to reflect their best possible potential, since less than the optimal initial proposal could result in the exclusion of the offeror from further consideration.

B. The basis for award will be a tradeoff process. The Source Selection Authority (SSA) might not select the lowest priced offer even if it is technically acceptable. The SSA might not select the offeror rated the highest in the non-cost elements, if their perceived advantages are not considered worth the cost premium. In selecting which offer represents the Best Value, the SSA will consider all of the evaluation elements and their relative importance as stated below. The SSA will determine which offer represents the Best Value to the Government by considering the cost and non-cost advantages and disadvantages. The Government reserves the right to award no contract and the right to award to other than the low offeror.

Although Price is not the most important consideration, it could be controlling. Where an otherwise superior proposal is not affordable or is unreasonably priced, where two proposals are otherwise considered equal, or where the advantages of a superior proposal are not worth the price premium, price could be the deciding factor.

Proposals which merely offer to perform the work in accordance with the Request for Proposal (RFP), or which are so lacking in content and detail that the Government cannot conduct a meaningful evaluation without significant supplemental information are unacceptable and may be rejected.

Any proposal, which is considered unrealistic in terms of technical capability unrealistically high or low in price, or contains significant inconsistency between proposed performance and price might be judged as lacking competence or failing to understand the requirements or the work required. In such cases, the proposal may be rejected.

1. Technical Capability Risk. Technical Capability Risk is defined as the risk associated with the offeror's proposed approach in meeting the requirements of the solicitation. The Government will evaluate the risk that the offeror's proposed Aiming Post Light design will meet the requirements of the solicitation. Consideration will be given to the Factors of System Performance and Design, and Power Source Life and Reliability. The System Performance and Design Factor is more important than the Power Source Life and Reliability Factor.

The System Performance and Design Factor will be evaluated based upon the Subfactors of Design and Interface; Illumination Criteria; Environmental; and Human Factors and Safety. Each of these Subfactors is of equal importance.

The Power Source Life and Reliability Factor will be evaluated based upon the Subfactors of Power Source Life and Reliability. Each of these Subfactors is of equal importance.

2. Quality Risk. Quality Risk is defined as the risk associated with the offeror's likelihood of being successful in performing the requirements of the solicitation. The Government will evaluate the offeror's present and past quality performance. Consideration will be given to the Factors of Quality System; Process Control System; and Hardware Quality Control. Quality System and Process Control are equal in importance, while Process Control and Hardware Quality History combined are equal in importance to Quality System.

The Quality System Factor will be evaluated based upon the offeror's present and past quality performance. The Government will determine the offeror's likelihood of being successful in performing the requirements of the solicitation. Offerors with established, managed and systemic approaches to doing business tend to produce fully conforming items in accordance with contract requirements.

The Process Control System Factor will be evaluated based upon the offeror's data to determine how well the Process Control System will conform with all contractual requirements.

The Hardware Quality History Factor will be evaluated based upon available data reflecting valid offeror attributable hardware defects. Valid is defined as a manufacturing defect or design defect or an assembly defect.

3. Performance Risk. Performance Risk is defined as the risk associated with the offeror's ability to perform the solicitation requirements as indicated by the offeror's record of past and current relevant performance. The Past Performance Factor will be evaluated based upon the Subfactors of Past Performance and Small Business Participation. The Subfactor of Past Performance is more important than the Subfactor of Small Business Participation.

The Government will focus its past performance on all aspects of contract performance. In evaluating the offeror's performance history, the Government will look at overall workmanship/quality, timeliness of performance, adherence to contract delivery schedules, reasonable and cooperative behavior in business relations and commitment to customer satisfaction.

A significant achievement, problem, or lack of relevant data in any element of the work can become an important consideration in the source selection process. Therefore, offerors are reminded to include all the relevant past efforts, including demonstrated corrective actions, in their proposals. The lack of meaningful relevant past performance records may result in an unknown Performance Risk rating.

Offerors are cautioned that, in conducting the past performance risk assessment, the Government may use data provided by the offeror in its proposal and data obtained from other sources. Since the Government may not necessarily interview all of the sources provided by the offerors, it is incumbent upon the offeror to explain the relevance of the data provided. The Government does not assume the duty to search for data to cure problems found in proposals. Offerors are reminded that while the Government may elect to consider data obtained from other sources, the burden of providing thorough and complete past performance information rests with the offerors. The Government may reject a proposal if it does not contain the information required.

The Subfactor of Small Business Participation will be evaluated based upon the extent to which offerors (both large and small businesses) identify and commit to utilizing, SBs, HUBZone

SBs, SDBs, WOSBs and HBCU/MIs in the performance of the contract, whether as the contractor or a subcontractor or as a member of a joint venture or teaming arrangement. The evaluation will include the following:

a. The extent to which the proposal specifically identifies SBs, HUBZone SBs, SDBs, WOSBs and HBCU/MIs, the specific items/services they will furnish, and the estimated dollar value of their participation, including the participation of the offeror, if it is a SB, HUBZone SB, SDB, WOSB, or an HBCU/MI;

b. The complexity of the items/services to be furnished by SBs, HUBZone SBs, SDBs, WOSBs, and HBCU/MIs;

c. The extent of participation of such concerns in terms of the value of the total contract amount; and

d. An assessment of the risk, based upon past performance, of the offeror actually achieving the involvement of small business concerns as proposed. Such assessment will include:

(1) For all offerors, an evaluation of the performance over the past three calendar years in complying with the requirements of FAR 52.219-8, Utilization of Small Business and Small Disadvantaged Business Concerns; and

(2) For offerors who are large businesses, as defined by the Standard Industrial Code applicable to this solicitation, an additional evaluation of past performance over the last three calendar years in complying with the requirements of FAR 52.219-9, Small Business and Small Disadvantaged Business Subcontracting Plan. Where a large business has not held a contract that included FAR 52.219-9, its prior performance will be evaluated against FAR 52.219-8 only.

4. Price. The Evaluated Price will be calculated by summing the multiplication of each Order Quantity Unit Price by its respective Weight and Minimum Order Quantity of the Range; i.e., 300, 600, 900 and 1,200, for each Ordering Period. In the case of Ordering Period 1, the First Article Test (FAT) cost will be added as part of the Evaluated Price. The sum of all Ordering Period Evaluated Prices will be the Total Evaluated Price.

Evaluation for price reasonableness may include: (1) determining adequate price competition using comparison of proposed prices in response to the solicitation; (2) information other than cost or pricing data, and/or (3) cost and pricing data if necessary. The Government reserves the right to require the submission of any information necessary to validate the reasonableness of an offer. Reasonableness is interpreted to mean the price does not exceed what an ordinarily prudent person in the conduct of competitive business would incur.

Any proposal that is unrealistically high or low in price will be deemed indicative of a failure to comprehend the Government's requirements and may be rejected for such a reason. Realistic means that the proposed price is realistic for the work to be performed and reflects a clear understanding of the solicitation requirements.

Consideration of price may be a controlling issue if higher overall evaluated proposals are submitted at a price that the Government cannot afford.

C. Standards for Rating: A Source Selection Authority (SSA) has been assigned to determine which proposal represents the best value to the Government. To assist the SSA, evaluators will

review offers in the Areas of Technical Capability Risk, Quality Risk, and Performance Risk, and will assign adjectival/narrative ratings. Evaluators will assign ratings at the Factor and Subfactor level, as well as at the Area level. The SSA will review these ratings, but is not bound by them.

1. The possible ratings for the Technical Capability Risk Area are:

a. Excellent/Low Risk: Risk is low to very low with a high probability that the proposed design will fulfill all physical and/or operational requirements of the contract. The proposal is fully detailed and supported with various forms of documentation that substantiates design maturity that is ready to enter production.

b. Adequate/Moderate Risk: Risk is moderate. Supporting documentation indicates that some redesign may be necessary to fulfill the physical and/or operational requirements of the contract. The redesign is considered feasible with a moderate amount of time and effort, but the design will be ready to enter production and meet the contractual delivery schedule.

c. Marginal/High Risk: Risk is high with low probability that the design will fulfill the physical and/or operational requirements of the contract. Significant redesign may be necessary. Redesign is considered feasible with a substantial amount of time and effort, thus a significant production delay is considered likely.

2. A negative finding under any Factor or Subfactor may result in an overall Marginal/High Risk Technical Capability Risk rating.

3. The possible ratings for the Quality Risk Area are:

a. Excellent/Very Low Risk: Essentially no doubt exists that the offeror will successfully perform the required effort.

b. Good/Low Risk: Little doubt exists that the offeror will successfully perform the required effort.

c. Adequate/Moderate Risk: Some doubt exists that the offeror will successfully perform the required effort.

d. Marginal/High Risk: Substantial doubt exists that the offeror will successfully perform the required effort.

e. Poor/Very High Risk: It is extremely doubtful that the offeror will successfully perform the required effort.

4. A negative finding under any Factor or Subfactor may result in an overall Poor/Very High Risk Quality Proposal Risk rating.

5. The possible ratings for the Performance Risk Area are:

a. Excellent/Low Risk: Essentially no doubt exists that the offeror will successfully perform the required effort based on their performance record.

b. Good/Low to Moderate Risk: Little doubt exists that the offeror will successfully perform the required effort based on their performance record.

c. Adequate/Moderate Risk: Some doubt exists that the offeror will successfully perform the required effort based on their performance record.

d. Marginal/Moderate to High Risk: Significant doubt exists that the offeror will successfully perform the required effort based on their performance record.

e. Poor/High Risk: Extremely doubtful that the offeror will successfully perform the required effort based on their performance record.

f. Unknown/Unknown Risk: The offeror has little/no relevant past meaningful performance risk prediction.

6. The Government may obtain information on the offeror's past performance from independent sources, in addition to the information submitted by the offeror.

7. While the Government may elect to consider information from other sources, the burden of providing thorough and complete past performance information rests with the offeror.

8. A negative finding under any Factor or Subfactor may result in an overall Poor/High Performance Risk Proposal rating.

9. Within the Performance Risk Area, adjectival ratings will be assigned in accordance with the following Small Business Adjectival Scale. The adjectival rating that most closely meets the evaluation conclusion will be applied.

SMALL BUSINESS UTILIZATION
ADJECTIVAL SCALE

ADJECTIVAL	**DEFINITION AND CRITERIA**
Excellent	Proposal includes a substantial portion of the work, in terms of dollar value (more than 20%) and complexity, to be performed in the Small Business (SB), HUBZone Small Business, Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), and Historically Black Colleges and University/ Minority Institution (HBCU/MI) sector by the prime (if so qualified) and/or as subcontractors or team members. Offeror has substantive evidence suggesting prior achievement of subcontracting plans or policy goals. Based on the proposal and past performance history, the offeror's proposed goals and/or actions are substantial and are considered very realistic (very low risk).
Good	Proposal includes a significant portion of the work in terms of dollar value (more than 15%) to be performed in the Small Business (SB), HUBZone Small Business, Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), and Historically Black Colleges and University/ Minority Institution (HBCU/MI) sector by the prime (if so qualified) and/or as subcontractors or team members. Offeror has evidence suggesting prior achievement of most subcontracting plan or policy goals. Based on the offeror's proposal and past performance history, the offeror's proposed goals and/or actions are significant and are considered realistic (low risk).
Adequate	Proposal includes a reasonable portion of the work in terms of dollar value (more

	than 10%) or complexity to be performed in the Small Business (SB), HUBZone Small Business, Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), and Historically Black Colleges and University/ Minority Institution (HBCU/MI) sector by the prime (if so qualified) and/or as subcontractors or team members. Offeror has evidence suggesting prior achievement of some subcontracting plan or policy goals. Based on the offeror's proposal and past performance history, the offeror's proposed goals and/or actions are adequate and could be met if the offeror focuses attention on them (moderate risk).
Marginal	Proposal includes a minimal portion of the work in terms of dollar value (less than 10%) and complexity to be performed in the Small Business (SB), HUBZone Small Business, Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), and Historically Black Colleges and University/ Minority Institution (HBCU/MI) sector by the prime (if so qualified) and/or as subcontractors or team members. Based on the offeror's proposal and/or past performance history, there is little likelihood that more than a minimal portion of the work will be performed in this sector. (High risk)

Poor	Offeror demonstrates little or no commitment to using SBs, HUBZone SBs, SDBs, WOSBs and HBCU/MIs. There is no evidence that the offeror met his prior goals and/or shows no serious commitment and did not provide adequate justification for not doing so. Based on the proposal and/or past performance history, there is negligible likelihood that anything other than a token portion of the work will be performed in this sector. (Very high risk)

DAAE20-00-R-0003 EXHIBIT A

CONTRACT DATA REQUIREMENTS LIST
DD FORM 1423 (MECHANIZED)
CATEGORY: MISC SYSTEM/ITEM: M14 AIMING POST LIGHT
TO CONTRACT/PR: P19FFMX1

1. SEQUENCE NUMBER 14. DISTRIBUTION DRFT/REG/REPRO COPIES
2. TITLE OF DATA ITEM
3. SUBTITLE
4. DATA ITEM NUMBER
5. CONTRACT REFERENCE
6. TECHNICAL OFFICE 7. DD 250 8. APP CODE 9. DIST STATEMENT REQUIRED
10. FREQUENCY 11. AS OF DATE 15. TOTAL:
12. DATE OF 1ST SUBMISSION 13. DATE OF SUBSEQUENT SUBMISSION
16. REMARKS

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1. A001
2. CONFIGURATION CHANGE CONTROL*
3. ENGINEERING ACTIONS
4. DI-CMAN-81554
5. SECTION C
6. AMSTA-AR-ES 7. NO 8. - 9. **
10. ASREQ 11. ---
12. ASREQ 13. ASREQ
14. AMSTA-AR-CCL-F (ECALS) / / / /
15. TOTAL 0/ 0/ 0
16. REMARKS
PREPARE ENGINEERING ACTIONS IAW DI-CMAN-81544 AND SUBMIT ELECTRONICALLY VIA ECALS WORLDWIDE WEB PAGE HTTP://EDMD4.PICA.ARMY.MIL/.*DATA INFORMATION PACKET **DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.THE POC FOR ECALS IS LEE SADAUSKAS,AMSTA-AR-QAW,(973)724-6626 LEES@PICA.ARMY.MIL.

APPROVED BY: STEPHEN J HANSEN, SDMO, AMSTA-AR-QAD DATE: 06/07/2000